Paradigmes opaques, formes transparentes
La conjugaison du népali
(appendices)

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LingLunch Paris Diderot

4 février 2010

1 Conjugation tables

		COL *a*	COL *b*
PER 1	ROW *α*	birsãtʃʰu	—
	ROW *β*	—	birsãtʃʰaũ
PER 2	ROW *α*	birsãtʃʰɛs	birsãtʃʰas
	ROW *β*	birsãtʃʰjau	birsãtʃʰau
PER 3	ROW *α*	birsãtʃʰɛ	birsãtʃʰa
	ROW *β*	birsãtʃʰin	birsãtʃʰan
HON *high*		birsanuhũtʃʰa	

The present of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsãdatʃʰu	—
	ROW *β*	—	birsãdatʃʰaũ
PER 2	ROW *α*	birsãdatʃʰɛs	birsãdatʃʰas
	ROW *β*	birsãdatʃʰjau	birsãdatʃʰau
PER 3	ROW *α*	birsãdatʃʰɛ	birsãdatʃʰa
	ROW *β*	birsãdatʃʰin	birsãdatʃʰan
HON *high*		birsanuhũdatʃʰa	

The narrative present of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsanna	—
	ROW *β*	—	birsannaũ
PER 2	ROW *α*	birsannas	birsannas
	ROW *β*	birsannau	birsannau
PER 3	ROW *α*	birsanna	birsanna
	ROW *β*	birsannan	birsannan
HON *high*		birsanuhunna	

The short negative present of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsãdinã	—
	ROW *β*	—	birsãdajnaũ
PER 2	ROW *α*	birsãdinas	birsãdajnas
	ROW *β*	birsãdinau	birsãdajnau
PER 3	ROW *α*	birsãdina	birsãdajna
	ROW *β*	birsãdinan	birsãdajnan
HON *high*		birsanuhũdajna	

The long negative present of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsẽ	—
	ROW *β*	—	birsjaũ
PER 2	ROW *α*	birsis	birsis
	ROW *β*	birsjau	birsjau
PER 3	ROW *α*	birsi	birsjo
	ROW *β*	birsin	birse
HON *high*		birsanubhajo	

The simple past of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsinã	—
	ROW *β*	—	birsenaũ
PER 2	ROW *α*	birsinas	birsinas
	ROW *β*	birsinau	birsenau
PER 3	ROW *α*	birsina	birsena
	ROW *β*	birsinan	birsenan
HON *high*		birsanubhaena	

The negative simple past of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsãtʰẽ	—
	ROW *β*	—	birsãtʰjaũ
PER 2	ROW *α*	birsãtʰis	birsãtʰis
	ROW *β*	birsãtʰjau	birsãtʰjau
PER 3	ROW *α*	birsãtʰi	birsãtʰjo
	ROW *β*	birsãtʰin	birsãtʰe
HON *high*		birsanuhũtʰjo	

The past imperfective of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsãdatʰẽ	—
	ROW *β*	—	birsãdatʰjaũ
PER 2	ROW *α*	birsãdatʰis	birsãdatʰis
	ROW *β*	birsãdatʰjau	birsãdatʰjau
PER 3	ROW *α*	birsãdatʰi	birsãdatʰjo
	ROW *β*	birsãdatʰin	birsãdatʰe
HON *high*		birsanuhũdatʰjo	

The narrative past imperfective of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsannatʰẽ	—
	ROW *β*	—	birsannatʰjaũ
PER 2	ROW *α*	birsannatʰis	birsannatʰis
	ROW *β*	birsannatʰjau	birsannatʰjau
PER 3	ROW *α*	birsannatʰi	birsannatʰjo
	ROW *β*	birsannatʰin	birsannatʰe
HON *high*		birsanuhunnatʰjo	

The short negative past imperfective of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsãdinatʰẽ	—
	ROW *β*	—	birsãdajnatʰjaũ
PER 2	ROW *α*	birsãdinatʰis	birsãdajnatʰis
	ROW *β*	birsãdinatʰjau	birsãdajnatʰjau
PER 3	ROW *α*	birsãdinatʰi	birsãdajnatʰjo
	ROW *β*	birsãdinatʰin	birsãdajnatʰe
HON *high*		birsanuhũdatʰjo	

The long negative past imperfective of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsãtʰinã	—
	ROW *β*	—	birsãtʰenaũ
PER 2	ROW *α*	birsãtʰinas	birsãtʰinas
	ROW *β*	birsãtʰinau	birsãtʰenau
PER 3	ROW *α*	birsãtʰina	birsãtʰena
	ROW *β*	birsãtʰinan	birsãtʰenan
HON *high*		birsanuhũtʰena	

The 'thi' form negative past imperfective of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW *α*	birsũlā	—
	ROW *β*	—	birsaũlā
PER 2	ROW *α*	birselis	birselās
	ROW *β*	birsauli	birsaulā
PER 3	ROW *α*	birseli	birselā
	ROW *β*	birselin	birselān
HON *high*		birsanuholā	

The future of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW α	birsojna	—
	ROW β	—	birsojnaũ
PER 2	ROW α	birsojnas	birsojnas
	ROW β	birsojnau	birsojnau
PER 3	ROW α	birsojna	birsojna
	ROW β	birsojnan	birsojnan
HON *high*		birsanuhojna	

The suffixal negative future of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW α	nabirsũlā	—
	ROW β	—	nabirsaũlā
PER 2	ROW α	nabirselis	nabirselās
	ROW β	nabirsauli	nabirsaulā
PER 3	ROW α	nabirseli	nabirselā
	ROW β	nabirselin	nabirselān
HON *high*		nabirsanuholā	

The prefixal negative future of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW α	birsũ	—
	ROW β	—	birsaũ
PER 2	ROW α	birses	birses
	ROW β	birse	birse
PER 3	ROW α	birsos	birsos
	ROW β	birsun	birsun
HON *high*		birsanuhos	

The injunctive of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW α	nabirsũ	—
	ROW β	—	nabirsaũ
PER 2	ROW α	nabirses	nabirses
	ROW β	nabirse	nabirse
PER 3	ROW α	nabirsos	nabirsos
	ROW β	nabirsun	nabirsun
HON *high*		nabirsanuhos	

The negative injunctive of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW α	—	—
	ROW β	—	—
PER 2	ROW α	birsii	birsii
	ROW β	birsa	birsa
PER 3	ROW α	—	—
	ROW β	—	—
HON *high*		birsanuhos	

The imperative of *birsanu* 'forget'

		COL *a*	COL *b*
PER 1	ROW α	—	—
	ROW β	—	—
PER 2	ROW α	nabirsii	nabirsii
	ROW β	nabirsa	nabirsa
PER 3	ROW α	—	—
	ROW β	—	—
HON *high*		nabirsanuhos	

The negative imperative of *birsanu* 'forget'

2 The full PFM account

2.1 Features

Notes:

- Traditional grammar recognizes an opposition between *narrative* and *non-narrative* forms of positive imperfective (indicative present and past) subparadigms. The semantic import of the distinction is somewhat elusive. Corresponding negative forms are said to neutralize the narrative/ non-narrative opposition, but do also occur in pairs. Here we assume a uniform distinction between long and short forms, in both polarities, and sidestep the investigation of the semantic import of this distinction (or lack thereof).
- There is a certain affinity between future tense, injunctive and imperative forms. Note that the synthetic future is an irrealis future (the realis future is periphrastic), and that the injunctive has both uses similar to that of an imperative and uses similar to that of a subjunctive. Here we conservatively assume that the three subparadigms belong to three distinct modes (indicative, injunctive, imperative), but our account could probably be improved upon by a thourough study of the uses of these subparadigms.

- All person, gender and number distinctions are neutralized in the high honirification level. Moreover these forms are quasi-analytic, and rest on the conjugation of the auxiliary *hunu*. Since a treatment of (quasi-)periphrasis would take us too far afield, we include these forms in the conjugation tables but do not treat them in the fragment.

2.1.1 Feature inventory

attribute	possible values
MODE	*ind* (indicative), *inj* (injunctive), *imp* (imperative)
TENSE	*prst* (present), *past*, *fut* (future)
ASP (aspect)	*perf* (perfective), *imperf* (imperfective)
POL (polarity)	*pos* (positive), *neg* (negative)
FORM	*short*, *long*, *thi*
PER (person)	*1*, *2*, *3*
GEN (gender)	*mas* (masculine), *fem* (feminine)
NB (number)	*sg* (singular), *pl* (plural)
HON (honorification)	*low*, *mid*, *high*
COL (column)	*a*, *b*
ROW	α, β
CLASS	*cc*, *cv*, *vc*, *vv*

2.1.2 Feature cooccurrence restrictions

FCRs are written in the format of Gazdar et al. (1985)

(1) Tense, aspect, mode
   a. {TENSE} ⊃ {MODE *ind*}
   b. {ASP} ⊃ {MODE *ind*}
   c. {TENSE FUT} ⊃ ~ {ASP}
   d. {TENSE *prst*} ⊃ {ASP *imperf*}

(2) Negative forms
   a. {FORM *short*} ⊃ {MODE *ind*}
   b. {FORM *thi*} ⊃ {TENSE *past*, ASP *imperf*, POL *neg*}
   c. {TENSE *past*, ASP *perf*, POL *neg*} ⊃ {FORM *long*}

(3) Person
   a. {MODE *imp*} ⊃ {PER *2*}
   b. {PER *1*} ⊃ ~ {HON}

(4) Columns
   a. {NB *pl*} ⊃ {COL *b*}
   b. {GEN *fem*, NB *sg*} ⊃ {COL *a*}
   c. {GEN *mas*, NB *sg*} ⊃ ({PER *1*} ≡ {COL *a*})

(5) Rows
   a. {NB *pl*} ⊃ {ROW β}
   b. {HON *mid*} ⊃ {ROW β}
   c. {HON *low*, NB *sg*} ⊃ {ROW α}
   d. {PER *1*, NB *sg*} ⊃ {ROW α}

(6) Classes
   a. {CLASS *vc*, POL *neg*} ⊃ {FORM *long*}

2.1.3 Correspondance table

traditional name	feature set
present	{MODE *ind*, TENSE *psrt*, ASP *imperf*, POL *pos*, FORM *short*}
narrative present	{MODE *ind*, TENSE *psrt*, ASP *imperf*, POL *pos*, FORM *long*}
short negative present	{MODE *ind*, TENSE *psrt*, ASP *imperf*, POL *neg*, FORM *short*}
long negative present	{MODE *ind*, TENSE *psrt*, ASP *imperf*, POL *neg*, FORM *long*}
simple past	{MODE *ind*, TENSE *past*, ASP *perf*, POL *pos*}
negative simple past	{MODE *ind*, TENSE *past*, ASP *perf*, POL *neg*, FORM *long*}
past imperfective	{MODE *ind*, TENSE *past*, ASP *imperf*, POL *pos*, FORM *short*}
narrative past imperfective	{MODE *ind*, TENSE *past*, ASP *imperf*, POL *pos*, FORM *long*}
short negative past imperfective	{MODE *ind*, TENSE *past*, ASP *imperf*, POL *neg*, FORM *short*}
long negative past imperfective	{MODE *ind*, TENSE *past*, ASP *imperf*, POL *neg*, FORM *long*}
'thi' form negative past imperfective	{MODE *ind*, TENSE *past*, ASP *imperf*, POL *neg*, FORM *thi*}
future	{MODE *ind*, TENSE *fut*, POL *pos*}
suffixal negative future	{MODE *ind*, TENSE *fut*, POL *neg*, FORM *short*}
prefixal negative future	{MODE *ind*, TENSE *fut*, POL *neg*, FORM *long*}
injunctive	{MODE *inj*, POL *pos*}
negative injunctive	{MODE *imper*, POL *neg*}
imperative	{MODE *imper*, POL *pos*}
negative imperative	{MODE *imper*, POL *neg*}

2.2 Realization rules

Rules are written in the format of Ackerman and Stump (2004).

(7) Block 1

a. X, σ : {TENSE *fut*} $\longrightarrow X \oplus u^{\triangleright}$

b. X, σ : {CLASS *cc*, TENSE *fut*} $\longrightarrow X \oplus e^{\triangleright}$

c. X, σ : {CLASS *cv*, TENSE *fut*} $\longrightarrow X \oplus e^{\triangleright}$

d. X, σ : {CLASS *cc*, ASP *imperf*} $\longrightarrow X \oplus a$

e. X, σ : {CLASS *vv*, ASP *imperf*} $\longrightarrow X \oplus u$

(8) Block 2

a. X, σ : {ASP *imperf*} $\longrightarrow X \oplus {}^{\triangleleft}n$

(9) Block 3

a. X, σ : {ASP *imperf*, FORM *long*} $\longrightarrow X \oplus d$

(10) Block 4

a. X, σ : {POL *neg*, FORM *long*, COL *a*} $\longrightarrow X \oplus i$

b. X, σ : {ASP *imperf*, FORM *long*, POL *neg*, COL *b*} $\longrightarrow X \oplus aj$

c. X, σ : {TENSE *past*, POL *neg*, ASP *perf*, COL *b*} $\longrightarrow X \oplus e$

d. X, σ : {TENSE *past*, POL *neg*, ASP *perf*, PER *2*, ROW α, COL *b*} $\longrightarrow X \oplus i$

e. X, σ : {ASP *imperf*, FORM *long*, POL *pos*} $\longrightarrow X \oplus a$

f. X, σ : {POL *neg*, FORM *short*, TENSE *fut*} $\longrightarrow X \oplus oj$

(11) Block 5

a. X, σ : {POL *neg*} $\longrightarrow X \oplus na^{\triangleright}$

b. X, σ : {POL *neg*, MODE *inj*} $\longrightarrow na \oplus X$

c. X, σ : {POL *neg*, MODE *imp*} $\longrightarrow na \oplus X$

(12) Block 6

a. $X, \sigma : \{\text{POL } \textit{pos}, \text{TENSE } \textit{pres}, \text{MODE } \textit{ind}\} \longrightarrow X \oplus t\int^{h}a^{\triangleright}$

b. $X, \sigma : \{\text{TENSE } \textit{past}, \text{ASP } \textit{imperf}\} \longrightarrow X \oplus t^{h}$

(13) Block 7

a. $X, \sigma : \{\text{TENSE } \textit{past}, \text{ASP } \textit{imperf}\} \longrightarrow X \oplus i$

b. $X, \sigma : \{\text{TENSE } \textit{pres}, \text{POL } \textit{pos}, \text{COL } \textit{a}, \text{ROW } \beta\} \longrightarrow X \oplus i$

(14) Block 8

a. $X, \sigma : \{\text{TENSE } \textit{pres}, \text{POL } \textit{pos}, \text{COL } \textit{a}, \text{ROW } \alpha\} \longrightarrow X \oplus \varepsilon$

b. $X, \sigma : \{\text{TENSE } \textit{pres}, \text{POL } \textit{pos}, \text{PER } \textit{1}, \text{COL } \textit{a}, \text{ROW } \alpha\} \longrightarrow X \oplus u$

c. $X, \sigma : \{\text{MODE } \textit{ind}, \text{PER } \textit{1}, \text{ROW } \alpha\} \longrightarrow X \oplus \tilde{a}$

d. $X, \sigma : \{\text{MODE } \textit{ind}, \text{TENSE } \textit{fut}, \text{PER } \textit{1}, \text{ROW } \alpha\} \longrightarrow X \oplus \tilde{u}$

e. $X, \sigma : \{\text{MODE } \textit{inj}, \text{PER } \textit{1}, \text{ROW } \alpha\} \longrightarrow X \oplus \tilde{u}$

f. $X, \sigma : \{\text{PER } \textit{1}, \text{ROW } \beta, \text{COL } \textit{b}\} \longrightarrow X \oplus a\tilde{u}$

g. $X, \sigma : \{\text{MODE } \textit{ind}, \text{PER } \textit{2}, \text{ROW } \beta\} \longrightarrow X \oplus au$

h. $X, \sigma : \{\text{MODE } \textit{inj}, \text{PER } \textit{2}\} \longrightarrow X \oplus e$

i. $X, \sigma : \{\text{MODE } \textit{inj}, \text{PER } \textit{3}\} \longrightarrow X \oplus o$

(15) Block 9

a. $X, \sigma : \{\text{POL } \textit{pos}, \text{TENSE } \textit{fut}, \text{COL } \textit{a}\} \longrightarrow X \oplus li$

b. $X, \sigma : \{\text{POL } \textit{pos}, \text{TENSE } \textit{fut}, \text{COL } \textit{b}\} \longrightarrow X \oplus l\tilde{a}$

c. $X, \sigma : \{\text{POL } \textit{pos}, \text{TENSE } \textit{fut}, \text{PER } \textit{1}, \text{ROW } \alpha, \text{COL } \textit{a},\} \longrightarrow \langle X, \sigma / \{\text{COL } \textit{b}\}\rangle : 9$

(16) Block 10

a. $X, \sigma : \{\text{PER } \textit{2}, \text{ROW } \alpha\} \longrightarrow X \oplus s$

b. $X, \sigma : \{\text{PER } \textit{3}, \text{ROW } \beta\} \longrightarrow X \oplus n$

c. $X, \sigma : \{\text{MODE } \textit{inj}, \text{PER } \textit{3}, \text{ROW } \alpha\} \longrightarrow X \oplus s$

Portmanteau Rules

(17) Block 4-7

$X, \sigma : \{\text{TENSE } \textit{past}, \text{ASP } \textit{imperf}, \text{POL } \textit{neg}, \text{FORM } \textit{thi}\} \longrightarrow \langle \langle X, \sigma \rangle : 6, \sigma / \{\text{ASP } \textit{perf}, \text{FORM } \textit{long}\}\rangle : 4\text{-}5$

(18) Block 7-10

a. $X, \sigma : \{\text{TENSE } \textit{past}, \text{ASP } \textit{imperf}, \text{PER } \textit{1}, \text{ROW } \alpha\} \longrightarrow X \oplus \tilde{e}$

b. $X, \sigma : \{\text{TENSE } \textit{past}, \text{ASP } \textit{imperf}, \text{PER } \textit{3}, \text{ROW } \alpha, \text{COL } \textit{b}\} \longrightarrow X \oplus jo$

c. $X, \sigma : \{\text{TENSE } \textit{past}, \text{ASP } \textit{imperf}, \text{PER } \textit{3}, \text{ROW } \beta, \text{COL } \textit{b}\} \longrightarrow X \oplus e$

d. $X, \sigma : \{\text{TENSE } \textit{past}, \text{ASP } \textit{perf}, \text{POL } \textit{pos}\} \longrightarrow \langle X, \sigma / \{\text{ASP } \textit{imperf}\}\rangle : 7\text{-}10$

(19) Block 8-10

a. $X, \sigma : \{\text{MODE } \textit{ind}, \text{POL } \textit{neg}, \text{FORM } \textit{short}, \text{PER } \textit{1}, \text{ROW } \alpha\} \longrightarrow X$

b. $X, \sigma : \{\text{MODE } \textit{imp}, \text{PER } \textit{2}, \text{ROW } \beta\} \longrightarrow X \oplus a$

c. $X, \sigma : \{\text{CLASS } \textit{cv}, \text{MODE } \textit{imp}, \text{PER } \textit{2}, \text{ROW } \beta\} \longrightarrow X \oplus u$

d. $X, \sigma : \{\text{CLASS } \textit{vv}, \text{MODE } \textit{imp}, \text{PER } \textit{2}, \text{ROW } \beta\} \longrightarrow X \oplus u$

e. $X, \sigma : \{\text{CLASS } \textit{cc}, \text{MODE } \textit{imp}, \text{PER } \textit{2}, \text{ROW } \alpha\} \longrightarrow X \oplus ii$

(20) Block 1-10

$X, \sigma : \{\text{POL } \textit{neg}, \text{TENSE } \textit{fut}, \text{FORM } \textit{long}\} \longrightarrow na \oplus \langle X, \sigma / \{\text{POL } \textit{pos}\}\rangle : 1\text{-}10$

2.3 Morphophonology

All rules and tables work on phonemic representations. We list here only the morphophonological rules necessary to go from the output of the paradigm function to the forms in the following tables.

(21) "X$^{\triangleright}$" notes a segment that is soluble to its right:
   a. $[\alpha \text{ voc}, \beta \text{ cons}]^{\triangleright} \rightarrow \emptyset / \_\_\_\_ [\alpha \text{ voc}, \beta \text{ cons}]$
   b. $X^{\triangleright} \rightarrow X$ elsewhere.

(22) "$^{\triangleleft}$X" notes a segment that is soluble to its left:
   a. $^{\triangleleft}[\alpha \text{ voc}, \beta \text{ cons}] \rightarrow \emptyset / [\alpha \text{ voc}, \beta \text{ cons}] \_\_\_\_$
   b. $^{\triangleleft}X \rightarrow X$ elsewhere.

(23) o → u/____[+nasal, +cons] (Pokharel, 1980)

(24) Vn → Ṽ/____[−cont]

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